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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,134	04/08/2004	Han Jun Sung	1594.1364	6666
21171	7590	09/20/2005	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			EARLY, MICHAEL JACOBY	
			ART UNIT	PAPER NUMBER
			3749	

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/820,134

Applicant(s)

SUNG ET AL.

Examiner

Michael J. Early

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2004.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-3, 5-9 and 12-14 is/are rejected.
7) ☒ Claim(s) 4, 10, 11 and 15-18 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 08 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 10/820,134.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 04/08/04.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

DETAILED ACTION

Priority

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 2003-63016 (KR), filed on 9/9/03.

Information Disclosure Statement

The Information Disclosure Statement for this application meets all of the requirements set forth and has been approved by the examiner.

Oath/Declaration

The Oath/Declaration for this application meets all of the requirements set forth and has been approved by the examiner.

Drawings

The Drawings for this application meet all of the requirements set forth and has been approved by the examiner.

Specification

The disclosure is objected to because of the following informalities:

- On page 3, paragraph 0015; the last sentence states: "...fan blowing air into the air discharging pipe and is discharged to an outside of the grilling pipe...". It is unclear to where the air is being discharged (i.e. area outside of the grilling pipe, outside edge of the grilling pipe, etc.). It's suggested that this sentence be revised.
- On page 9, paragraph 0048; it states: "...the inlet 35 is removably inserted into each of the tapered holes 51, due to gravity, to be in close contact with...". It is unclear why the applicant states that the inlet of the cooker's grilling pipes are inserted into its respective tapered holes "due to gravity". It's suggested that this paragraph be revised.

- On page 9, paragraph 0051; the first sentence concludes with: "...grilling pipes 33does not burn." It's noted that a space must be inserted within "33does", so as to read: – 33 does –.

Appropriate correction is required.

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The title of this applicant, which reads: "Grill cooker and multipurpose cooking apparatus having the same", appears to be only partially stated and does not give a sufficient description of the invention at hand. It is suggested that the applicant completes the title of the present applicant or drafts up a new title.

Claim Objections

Claim 17 are objected to because of the following informalities:

- In claim 17, it states: "...depression to draw air into the air cooling unitto allow the grilling unit...". It's noted that a space must be inserted within "unitto" so as to read: – unit to –.

Claim Rejections - 35 USC § 112

Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements include: the location where the air inside of the air discharging pipes is being discharged. The claim is as follows:

3. The grill cooker according to claim 2, wherein the grilling pipe has an inlet at one end and an outlet at another end thereof, and the air cooling unit further comprises an air discharging pipe to connect the blowing fan to the inlet of the grilling pipe, the air entering the grilling pipe by the blowing fan blowing air into the air discharging pipe and being discharged to an outside of the grilling pipe through the outlet of the grilling pipe to maintain a temperature of the grilling pipe below a predetermined temperature.

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For the purposes of examining this application, the examiner has assumed that the claim is referring to the proximal area surrounding the grilling pipe; however, before this claim can be accepted, in this or a proceeding office action(s), the applicant must clarify where the air within the discharging pipe is being discharged.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1 – 3, 5 – 8 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (U.S. 6,405,639 B1) in view of Towery (U.S. 4,204,519).

Lee et al. disclose of meal roaster (see col. 4, lines 6 – 7), which is capable of preventing meat from burning and sticking to a grill, that comprises of: a heating unit (430 – heat source) generating heat; a grilling unit (302 – grill) provided above the heating unit, which comprises of an inlet (302c – inlet socket) at one end, an outlet (302d – outlet socket) at another end; a grilling pipe (302b – fluid circulating pipe); a cabinet (304 – body) that is open at a top thereof to form an opening, and where in it includes a heating unit (430 – heat source) and a grilling unit (302 – grill), which is seated on the opening of the cabinet; and a frame (302a – frame) that is provided on an upper portion of the grilling pipe along an edge of the grilling unit with possible exception to a grill cooker comprising of:

- a connection member, provided on an upper portion of a cabinet, that comprises a tapered hole that is tapered in a direction from a top to a bottom of the connection member, the inlet of the grilling pipe being connected to an upper portion of the tapered hole, and the air discharging pipe being connected to a lower portion of the tapered hole to allow the grilling pipe to be removably connected to the air discharging pipe using the connection member;
- the upper portion of the tapered hole has a diameter greater than an outer diameter of the grilling pipe, the lower portion of the tapered hole has a diameter less than the outer diameter of the grilling pipe, and the diameter of the lower portion of the tapered hole is approximately equal to an outer diameter of the air discharging pipe.

and an air cooling unit that is used to cool the grilling unit using air and comprises of:

- a blowing fan to blow air into the grilling pipe to cool the grilling unit;
- an air discharging pipe used to connect the blowing fan to the inlet of the grilling pipe, where the air entering the grilling pipe by the blowing fan blowing air into the air discharging pipe and being discharged to a location outside of the grilling pipe through the outlet of the grilling pipe to maintain a temperature of the grilling pipe below a predetermined temperature;

Attention is directed to the secondary reference, Towery, which teaches of a forced hot air heat exchanger that attaches to a woodburning fireplace and provides a means of more efficient heat transfer into a room than compared to what is radiated solely by a fire (see col. 1, lines 5 – 12). In addition, Towery's invention is a "simple, durable and inexpensive attachment..." and "...permits faster starting (even with 'green' wood), less tending, less smoke, build-up of red coals for more heat and leaves less ashes" (see col. 1, lines 22 – 29). The exchanger comprises of a blower (14), which supplies air through an elongated hollow leader (12) to a plurality of heat exchange tubes (16a, 16b, 16c...16n) (see col. 1, lines 57 – 62; Figure). It is further disclosed that an outlet horizontal section (36) is connected to one of the heat exchange tubes and is used to delivery air in the direction of a woodburning fire, which as seen pictorially is in a predetermined position, is the area immediately above the support legs (24a, 24b, 24c...24n) of the heat exchange tubes (see col.2, lines 21 – 27; Figure).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the existing meat roaster of Lee et al. by installing a blower, as taught by Towery, to supply air to the roaster's tubes in addition to the area immediately above the tubes, for the purpose of displacing the air and heat throughout the room.

In regard to claims 6, 8 and 12, they are unpatentable over Lee et al. in view of Towery as a result of design considerations.

Neither Lee et al. nor Towery discuss the exact shape or features of the connection member or manner in which the connection member is positioned with respect to the air discharging pipe and grilling pipe. In the present application, as previously stated, the applicant points out that the connection member comprises of a tapered hole that is tapered in a direction from top to bottom, has an upper portion whose diameter is greater than its lower portion's and that the grilling pipe is downwardly bent to be inserted into the tapered hole; however, has not disclosed that having a member tapered in this manner solves any stated problem or is for any particular purpose. Moreover, it appears that the cooker would perform equally well

with a removably connected connection member that is of any shape, has diameters whose extremities are of equal size and is horizontally inserted into the grilling pipe.

Therefore, it would have been obvious to provide a connection member that comprises of a tapered hole that is tapered from top to bottom and has an upper portion, which is vertically connected on the bottom of the grilling pipe's inlet, whose outer diameter is greater than that on its lower portion's, which itself is connected to the air discharging pipe, to ensure that the air discharging pipe is removably connected to the grilling pipe.

Accordingly, the use of a tapered connection member as disclosed above is deemed to be a design consideration, which fails to patentably distinguish over the prior art of Lee et al. and Towery.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. in view of Towery and in further view of Estes (U.S. 4,252,106).

As previously state, Lee et al. disclose of a meat roaster that can be modified by Towery with possible exception to a grilling pipe comprising of a plurality of grilling pipes, a connection member comprising of a plurality of connection members, and an air discharging pipe comprising of a plurality of air discharging pipes, where the plurality of connection members connect the plurality of air discharging pipes to inlets of the plurality of grilling pipes, respectively.

Attention is directed to the secondary reference, Estes, which teaches of a fireplace grate assembly that is used to distribute a significant amount of heat and comprises of: a blower (28; see col. 1, lines 64 – 65; Figure 1), which is positioned in the back of a cavity (42) (see col. 2, lines 36 – 37; Figure 5); a plenum (26; see col. 1, lines 64 – 65; Figure 1); grates (44 and 46; see col. 2, lines 15 – 18), which are connected to the assembly's plenum via flange receptacles (50; see col. 2, lines 31 – 34), and a cover (58) that is made out of a woven fiber material (see col. 2, lines 40 – 41; Figure 5). Benefits of this assembly over prior heating systems include its versatility to be used with any fireplace screen and ability to be positioned in unobtrusive locations (see col. 1, lines 38 – 44). Estes further discloses that by positioning the assembly

within a cavity and placing a cover upon it, the noise that is produced and the dust particles that are drawn into the blower are reduced (see col. 2, lines 36 – 44).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the existing meat roaster of Lee et al. in view of Towery by installing a plurality of grilling pipes that are connected to a plurality of air discharging pipes via a plurality of connections members, as taught by Estes, for the purpose of providing a greater circulation of air through the assembly's system of pipes.

Claims 13 – 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. in view of Towery and in further view of Cerola (U.S. 4,562,827).

As previously state, Lee et al. disclose of a meat roaster that can be modified by Towery with possible exception to a multipurpose cooking apparatus comprising of:

- a housing having at least one recess on an upper portion of the housing, and a grill cooker removably seated in the at least one recess;
- the grill cooker further comprises of: a heating unit generating heat; a grilling unit, which comprises of a blowing fan to blow air; and an air discharging pipe, which connects the blowing fan to the inlet of the grilling pipe and allows the air to be discharged to a location outside of the grilling pipe through the outlet of the grilling pipe.

Attention is directed to the secondary reference, Cerola, which teaches of a downdraft countertop cooking range that comprises of: a fan (50); louvers (45); ducts (48); a heater module (37; see col. 3, lines 3 – 5); a grill cooker (28 – grill module; see col. 2, lines 47 – 49; Figures 1 – 2) and two recesses (21 and 22 – right hand and left hand apertures; see col. 2, lines 39 – 41; Figure 4), which are used to receive the two heating elements. Cerola notes that this system is beneficial because it provides the ability to capture and remove smoke and other cooking emissions when operating at either partial or full capacity (see col. 4, lines 19 – 23). In addition, it is further disclosed that the range can be viewed as being an important safeguard against fire hazards due to the distribution of air about the system (see col. 4, lines 23 – 25).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the existing meat roaster of Lee et al. in view of Towery by installing it in a countertop cooking range, as taught by Cerola, for the purpose of providing a roaster that is removably assessable upon a cook top.

Allowable Subject Matter

Claims 4, 10 – 11 and 15 – 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Early whose telephone number is (571) 272-3681. The examiner can normally be reached on Monday - Friday, 7am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Monica S. Carter can be reached on (571) 272-4475. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJE
9/15/05

Michael J. Early
Patent Examiner
Art Unit 3749


MONICA S. CARTER
PRIMARY EXAMINER

